

# इंटरनेट

# मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4586-1-3 (1987): Dimensions of Spindles and Mounting Arrangements for Spindle Operated Electronic Components, Part 1: Spindles, Section 3: Flatted Spindles [LITD 3: Electromechanical COmponents and Mechanical Structures for Electronic Equipment]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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*Indian Standard***DIMENSIONS OF SPINDLES AND MOUNTING  
ARRANGEMENTS FOR SPINDLE OPERATED  
ELECTRONIC COMPONENTS****PART 1 SPINDLES****Section 3 Flatted Spindles***( Second Revision )*

**0. General** — This standard shall be used in conjunction with IS : 4586 ( Part 1/Sec 1 )-1987 'Dimensions of spindles and mounting arrangements for spindle operated electronic components: Part 1 Spindles, Section 1 General and definitions ( *second revision* )'.

**1. Scope** — Covers dimensions of flatted spindles.

**2. Dimensions** — See Table 1.

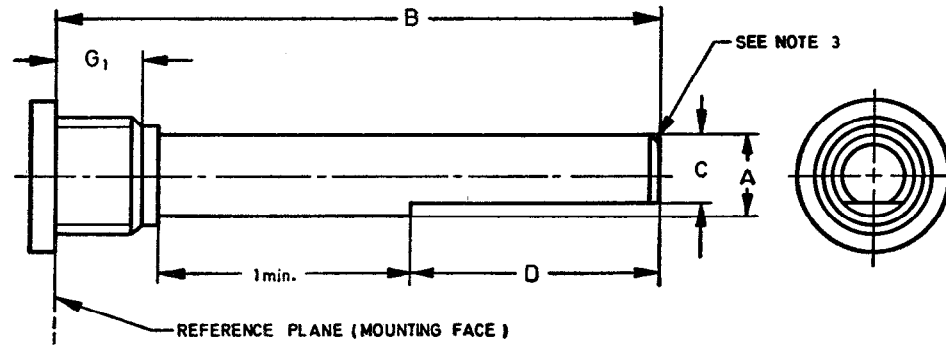
Adopted 10 June 1987

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**TABLE 1 DIMENSIONS OF FLATTED SPINDLE**  
( Clause 2 )

All dimensions in millimetres.



Dimension A ( See Notes 5 and 6 )		Dimension B ( See Notes 1, 2, 6 and 7 )								Dimension C ( See Notes 4 and 6 )		Dimension D	Dimension G, Min ( See Note 8 )
General h11*	Precision h9*	10 ± 0.5	16 ± 0.5	20 ± 0.5	32 ± 0.5	34.5 ± 0.5	40 ± 1	50 ± 1	63 ± 1	80 ± 1	Screwed knob	Push-on knob	
3 $\begin{smallmatrix} +0 \\ -0.06 \end{smallmatrix}$	3 $\begin{smallmatrix} +0 \\ -0.025 \end{smallmatrix}$	↑	↑	↑	↑	↑					2.5 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	2 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	No bush
3.2 $\begin{smallmatrix} +0 \\ -0.07 \end{smallmatrix}$	3.2 $\begin{smallmatrix} +0 \\ -0.03 \end{smallmatrix}$	↑	↑	↑	↑	↑					2.4 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	2.1 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	4
4 $\begin{smallmatrix} +0 \\ -0.075 \end{smallmatrix}$	4 $\begin{smallmatrix} +0 \\ -0.03 \end{smallmatrix}$	↓					↑				3.5 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	3.0 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	5
6 $\begin{smallmatrix} +0 \\ -0.075 \end{smallmatrix}$	6 $\begin{smallmatrix} +0 \\ -0.03 \end{smallmatrix}$							↑	↑		5.0 $\begin{smallmatrix} +0 \\ -0.2 \end{smallmatrix}$	4.0 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	6.35, 9.5
6.35 $\begin{smallmatrix} +0.03 \\ -0.08 \end{smallmatrix}$	6.35 $\begin{smallmatrix} +0 \\ -0.03 \end{smallmatrix}$										5.50 ± 0.13	5.50 ± 0.05	10
8 $\begin{smallmatrix} +0 \\ -0.09 \end{smallmatrix}$	8 $\begin{smallmatrix} +0 \\ -0.36 \end{smallmatrix}$									↑	7.0 $\begin{smallmatrix} +0 \\ -0.2 \end{smallmatrix}$	6.0 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	
10 $\begin{smallmatrix} +0 \\ -0.09 \end{smallmatrix}$	10 $\begin{smallmatrix} +0 \\ -0.036 \end{smallmatrix}$		↓	↓	↓	↓	↓	↓	↓	↓	9.0 $\begin{smallmatrix} +0 \\ -0.2 \end{smallmatrix}$	7.0 $\begin{smallmatrix} +0 \\ -0.1 \end{smallmatrix}$	

4, 5 and 6 in increments of 2 mm  
Tolerance ± 0.5

**Note 1** — If intermediate values are required, they should preferably be chosen from R 20 series (mm) [ see IS : 1076-1967 Preferred numbers ( first revision ) ].

**Note 2** — The tolerance on length may be ± 2 mm for potentiometers with high rated dissipation.

**Note 3** — Chamfer at 40°/50° or a radius for a depth of between 5 percent and 10 percent of dimension A.

**Note 4** — For moulded or insulated spindles, the tolerance for dimension C push-on-knobs may require modification to obtain the required withdrawal forces. The components specification shall indicate the correct dimension.

**Note 5** — The underlined dimensions are preferred diameters.

**Note 6** — Attention is drawn to the fact that dimensions A and C are interrelated.

**Note 7** — Values for dimension B are chosen from R 20 series (mm) [ see IS : 1076-1967 ].

**Note 8** — Fixing of bush may be done by pressing a 'C' washer in the groove cut on the spindle to a depth of 1 to 1.5 mm.

**Note 9** — Dimensions apply to spindles after suitable finish.

\*IS : 919 ( Part 1 ) - 1963 Recommendations for limits and fits for engineering: Part 1 General engineering ( first revision ).